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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,999	03/17/2000	Shiri Kadambi	P108339-00002	3375

32294 7590 02/12/2004

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EXAMINER
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HOANG, THAI D

ART UNIT	PAPER NUMBER
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2667

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DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/527,999

**Applicant(s)**

KADAMBI ET AL.

**Examiner**

Thai D Hoang

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 12/02/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being unpatentable over Hughes et al., US Patent No. 6,526,060 B1 hereafter referred to as Hughes.

Regarding claims 1 and 6, Hughes discloses a method and system called Dynamic rate-based, weighted fair scheduler. Hughes teaches that the system comprises”

a plurality of input/output ports BMX 300 for receiving in coming data packets from a source transmitting the received data packets to a destination corresponding to the address information in headers of the ATM cells; Fig. 2-3 (a source port for receiving an incoming packet from a source; a destination port which contains a path to a

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destination for the packet). Hughes teaches the BMX 300 computes a fair rate for servicing the cells from a plurality of connection queues and moving the cells from the connection queues to a class of service queue according to the fair rate. The fair rate may be computed by computing a target rate for servicing the connection queues, computing an observed arrival rate for cells arriving at the class of service queue, and computing the fair rate according to a ratio of the target rate to the observed arrival rate. The target rate may be approximated according to an amount of available bandwidth for the class of service queue (based on payload type and cell lost priority fields of the ATM header) and the number of cells serviced from the class of service queue in a period of time, fig. 4, col. 2, lines 10-24; col. 3, lines 40-55. In addition, Hughes discloses that the system comprises a algorithm to count number for cells in the queue for each connection such that the number of cell in a memory of the output do not exceed a threshold value; col.5, line 55- col. 6, line 13; col. 8, lines 19-39, col. 8, line 55-col. 9, line 14, col. 10, line 21 – col. 11, line 15.

Regarding claim 2, the system disclosed by Hughes inherently comprises a filter unit in order select and arrange into queues corresponding type of cell.

Regarding claim 3, Hughes discloses the BMX 300 comprise a queue controller 600, which controls cell input 630, memory 610 and output 640; fig. 6.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes et al., US Patent No. 6,526,060 B1, in view of Hoffman et al, US Patent No. 6,094,435, hereafter referred to as Hughes and Hoffman respectively.

Regarding claim 4, Hughes does not teach the limitation as recited the claim. However, Hoffman discloses a system and method for a quality of service in a multi-layer network element. The system disclosed by Hoffman comprises a forwarding memory 40 and an associated memory 42 (fig. 2) for storing incoming packets (an internal memory for storing first selected incoming packets therein); and a packet memory manager 54 coupled with a Packet buffer memory 44, wherein the packet memory manager 54 inherently comprises an interface in order to transmit/receive data packets to/from the packet buffer memory 44 (a memory management unit comprising an external memory interface for interfacing with an external memory, said external memory interface being configured to send second selected incoming packets to the external memory). Furthermore, Hoffman discloses in col. 9, line 9 – col. 10, line 13 and figures 3-4 the operation of the system, wherein the message information between input ports 50, output ports 56, packet memory manager 54, and packet buffer memory 44 are exchanged through a communication channel (a communication channel for communicating data and messaging information between the source port and the destination port, the internal memory, and the memory management unit). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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adapt Hoffman system into the system disclosed by Hughes for improving control data packet transmission in the system.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes et al., US Patent No. 6,526,060 B1, in view of Kloth et al, US Patent No. US 6,643,260 B1, hereafter referred to as Hughes and Kloth respectively.

Regarding claim 7, Hughes does not clearly teach that the fields of the selected packet type include a new code point. However, Kloth discloses a method and apparatus for implementing a quality of service policy in a data communications network. Kloth teaches that the system assigns a new code point for data cell based on its CoS, ToS and QoS; col. 4, line 45 –col. 5, line 18; col. 5, lines 54-66; col. 6, lines 26-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt Kloth method into the system disclosed by Hughes in order to data flow in the system because the data is controlled corresponding the load status of the system.

#### ***Allowable Subject Matter***

Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 2/9/24